List of Birds, chiefly from the Mergui Archipelago, collected for the Trustees of the Indian Museum, Calcutta. By John Anderson, M.D., LL.D., F.R.S., F.L.S.

[Read 17th June, 1886.]

THE following list of Birds chiefly records the distribution, in some of the more outlying islands of the Mergui Archipelago, of a few of the species enumerated by Messrs. Hume and Davison from the neighbouring mainland of Tenasserim.

It appears from the list of localities appended to the 'Birds of Tenasserim,' and from the text of the work itself, that Mr. Davison's researches in the Archipelago were confined to the islands of Kolan and Patoe (Pataw), and to some of the small islands in the immediate neighbourhood of Mergui; and it is stated that the island of Kolan\* is 25 miles south of Mergui, whilst Patoe or Patoi is described as "forming as it were the S.W. pier of Mergui harbour." On the other hand, Mr. Davison made a preliminary reconnaissance of the avifauna of that enormous and difficult tract of country known as the province of Tenasserim, which extends from the Pah-choung in the north to the Pakchan in the south, an area 625 miles in length and over 70 miles in breadth.

The following list is therefore published merely as a small supplementary contribution, if I may be permitted so to call it, to Mr. Davison's herculean labours in the Province; seeing it somewhat extends our knowledge of the distribution of some of the species in the northern portion of the Archipelago, a region to which his labours were very partially directed.

The islands to which my attention was chiefly confined were King Island, Elphinstone Island, and Sullivan Island. In the first 37 days, in the second 14 days, and in the third 9 days were all I could devote to bird-collecting. In King Island and Elphinstone Island I had to entrust the work to a Karen, as the other numerous duties to which I had to attend fully occupied my time, and because the Museum collectors I had brought with me from

<sup>\*</sup> In the chart of the northern part of the Mergui Archipelago, published in 1875 by the Hydrographic Office of the Admiralty, the only island called Kolan lies 5 miles directly to the west of the town of Mergui; while in the map of the southern portion of the Archipelago no island of that name is to be found; but there are in both charts many unnamed islands.

<sup>† &#</sup>x27;Stray Feathers,' vol. vi. p. ii.

Calcutta had proved thoroughly incapable and so timid that they would not enter the forest. Such a course had this great disadvantage, that it necessarily restricted my enumeration of the birds obtained to the limit of a mere list with localities.

The birds were identified in India before they were brought to this country; but in order to ensure accuracy it was desirable that they should be gone over by one thoroughly familiar with the subject, who would correct any errors of identification, and be able also to direct attention to any birds presenting features worthy of remark. I esteem myself fortunate in having secured for these ends the services of Major Wardlaw Ramsay, who possesses an intimate acquaintance with the birds of Tenasserim. I have indicated the few observations he has recorded by appending his name to them.

In the collection only one bird, Butreron Cappelli, appears as an addition to the fauna of Tenasserim; but at the same time the distribution of some of the species recorded in Messrs. Hume and Davison's 'Birds of Tenasserim' has been extended. While pointing out these few instances, I have not thought it necessary to repeat the distribution of species already fully recorded by these authors.

Having been present in the islands only for the very short periods already mentioned the list gives no information regarding the migrations of species beyond recording the presence of well-known migratory birds. Considering, however, the very different climatic conditions which prevail in the islands during the two monsoons, it is probable that the birds which frequent the smaller and more exposed islets and islands during the north-east monsoon congregate on the larger and more sheltered islands until the strength of the storms of the south-west monsoon is past,—if they are not in many instances driven for shelter to the mainland. Davison records that Halcyon chloris in December kept entirely to the sea-coast and banks of the creeks; but that in June, after the rains had commenced, it became very numerous about the gardens and even in the town of Mergui itself\*.

Judging from my observations in the localities I have mentioned (and I may state that I crossed King Island and Elphinstone

Island, and ascended the highest point, 1500 feet, of Sullivan Island), my impression is that bird-life is less richly represented than on the mainland; but of course this can only be accurately ascertained by a thorough investigation of the islands. This list, if it serves as a beginning to this end, will have fulfilled its purpose.

The islands, with the exception of a very limited portion of King Island, where there are a few scattered Burmese and Karen settlers, are uninhabited except by the sea-gipsies, the Selungs, who spend the greater part of the year on the sea in their boats, in which they eat and sleep while not fishing, or hunting with their dogs for pigs in the forest. During the south-west monsoon they betake themselves to sheltered bays, where they erect miserable temporary dwelling-places on stakes driven into the sands immediately above high-water mark. The absence of regular villages, the existence of strong and dangerous currents between the islands, and the presence of sunken rocks not yet indicated in the charts, make the Mergui Archipelago a difficult region to investigate. Moreover, during the south-west monsoon navigation among the islands towards the sea is almost impracticable to sailing vessels, so that unless steam were used, or the observer settled down in one of the groups for the season, observations would have to be confined to the north-east monsoon, when the sea is generally calm and the breezes moderate.

With regard to the first locality, King Island, or Padaw\* as known to the Burmese, it is situated about 10 miles due west of the town of Mergui. The island is 24 miles in length by 10 miles in breadth; it is hilly throughout, and its highest point, which lies nearest its southern end, the ridge running north and south, is 2123 feet high, but to the north and throughout the range there are other heights but little below 2000 feet. It is covered with a dense forest infested with tigers, pigs, and mouse-deer; and on the very summits of the highest peaks are to be found trees attaining nearly 200 feet in height. Apparently more streams water the eastern than the western side, and at their mouths, and, indeed, all along the sea-margin on this aspect of the island, are extensive Mangrove-forests, succeeded by undulating and hilly ground, on which are occasionally to be seen an orchard of Mangosteens, Dorians Areca-nuts, and Cocoa-nut Palms. On the western side,

which is exposed to the full force of the sea-breezes, and the slope of which is more steep, there are fewer Mangrove-swamps, and in place of orchards there are temporary fishing-stations. At Yimiki, in the centre of the island, towards the north, there are a few clearings made by Karens, Burmese, and some advanced Selungs; but the attempts at cultivation are insignificant considering the size of the island, which retains its character as a great primeval forest.

Elphinstone Island\* is the most seaward member of a group of beautiful islands lying to the south-west of King Island, and known to the Selungs as the Doang group. The three other principal islands of the group are Ross, Grant, and MacLeod Islands. Elphinstone Island is distant about 30 miles in a straight line from the town of Mergui. It is of irregular form, being cut up by numerous bays, and its highest point, which has not yet been measured, is visible 10 to 11 leagues at sea. The island is about 10 miles long and 8 in its extreme breadth; there is only one high peak, the rest of the island consisting of low hills, and the peak presents this peculiarity as compared with the other hills I have seen in the Archipelago, that a considerable area of its eastern aspect seems to be free of trees and to be rocky; but all the remainder of the island is covered with forest. No tigers are found in the Doang group, but pigs and mouse-deer are numerous.

Sullivan Island † is considerably to the south of King Island, as it lies 17 miles off the mainland and more or less parallel to it. It is a long and narrow island, being only 5 to 6 miles broad in its widest part, its average width not being more than 3 miles. It is traversed throughout its length by a ridge of hills rising to 1523 feet. It is also covered by a dense forest comparatively clear of undergrowth on some parts of the hill-slopes, and so dense overhead as to exclude the direct rays of the sun; the trees not unfrequently attaining to an altitude of 250 feet. In this island I first met with Casuarina equisetifolia growing wild along its western shore associated with Cycas Rumphii, two outlying members of the Austro-Malayan subregion.

<sup>\*</sup> Lat. 12° 16' to 12° 26' N.

<sup>†</sup> Lat. 10° 41′ 30″ to 10° 59′ 30″ N.

GEOCICHLA CITRINA (Lath.), Oates, Birds of British Burmah, vol. i. p. 3.

a.  $\sigma$ , Elphinstone Island, 1st; b.  $\sigma$ , 4th; and c.  $\circ$ , 5th March, 1882. d. Owen Island, 3rd Jan. 1882.

This bird is probably distributed over all the islands of the Archipelago of any size, with the exception of the more seaward chain of islands, which extends from Cabosa southwards to the Great Western Torres group. I observed it in the Elphinstone group and in Sullivan Island, almost the northern and southern extremes of the Archipelago.

Monticola Cyanus (Linn.), Oates, op. cit. vol. i. p. 11.

a. ♂, Ngā Islet, King Island, 11th Feb. 1882. b. ♀, Crow Islet, 27th Feb. 1882. c. ♀, Zediwon, Mergui, 23rd Dec. 1881. d. ♂ (variety), Mergui, 23rd March, 1882.

"The specimen, d, belongs to the intermediate form which Mr. Seebohm has called *M. cyanus solitaria*, Cat. Birds Brit. Mus. vol. v. p. 318." (Wardlaw Ramsay.)

A rocky islet, about 50 yards in length, 30 in width, and probably not more than 25 feet high, lies four miles to the west of King Island, the largest island in the Archipelago, and three miles to the south of Maingy Island, which rises to 2000 feet in height. This little islet consists chiefly of a mass of bare rock, but on a flattened portion of its summit were a few stunted scraggy shrubs and a profusion of long grass. A miniature cliff overhangs a little cave, with a muddy and sandy shelving shore, on which struggle some dwarfed mangrove-trees, while in a tiny gorge, down which trickles some fresh water, grows an abundance of ferns. On this sequestered spot I found Monticola cyanus associated with the following birds: Corvus macrorhynchus, Halcyon chloris, Hypothornis azurea, and Anthreptes malaccensis, some of which had built their nests and were breeding.

Copsychus saularis (Linn.), Oates, op. cit. vol. i. p. 20.

a. Thaing, King Island, 1st Feb. 1882. b. &, Elphinstone Island, 3rd March, 1882.

CITTOCINCLA MACRURA (Gm.), Oates, op. cit. vol. i. p. 22.

a. &, Elphinstone Island, 7th March, 1882. b. &, Yimiki, King Island, 24th Feb. 1882. c, d. Thaing, King Island, 31st Jan. 1882. e. &, Mergui, 23rd March, 1882.

MIXORNIS RUBRICAPILLUS (*Tick.*), Oates, op. cit. vol. i. p. 50. a, b, c. Sullivan Island, 9th Jan. 1882. d. Thaing, King

Island, 24th Jan. 1882. e. &, Elphinstone Island, 13th March, 1882.

Mr. W. Davison\*, in his invaluable notes on the Birds of Tenasserim, says that this bird is very abundant throughout the Province as far south as 13° N. lat. I, however, found it to be common in Sullivan Island, which lies between lat. 10° 42′ and 10° 59′ 50″ N.

TURDINUS ABBOTTI (Bl.), Oates, op. cit. vol. i. p. 58.

a. Sullivan Island, 12th Jan. 1882. b, c. Thaing, King Island, 31st Jan. 1882.

Pellorneum subochraceum, Swinhoe, Oates, op. cit. vol. i. p. 66.

a. Thaing, King Island, 23rd Jan. 1882. b. c, Elphinstone Island, 14th March, 1882.

"These specimens are remarkable for the rusty hue of their plumage; otherwise they are identical with Tenasserim specimens." (Wardlaw Ramsay.)

PHYLLOSCOPUS BOREALIS (Blas.), Oates, op. cit. vol. i. p. 77. a.  $\circ$ , Yimiki, King Island, 24th Feb. 1882.

SUTORIA SUTORIA (Forst.), Oates, op. cit. vol. i. p. 107.

a. Sullivan Island, 12th Jan. 1882.
 b. Mergui, 14th Dec. 1881.

Mr. Davison found this bird generally distributed throughout the province as far south as Mergui, but he does not appear to have found it to the south of that town.

ORTHOTOMUS ATRIGULARIS, Temm., Oates, op. cit. vol. i. p. 109. a. Thaing, King Island, 24th Jan. 1882.

SITTA FRONTALIS, Horsf., Oates, op. cit. vol. i. p. 134. a. &, Elphinstone Island, 5th; b, c. &, 6th March, 1882.

HERPOENIS XANTHOLEUCA (Hodgs.), Oates, op. cit. vol. i. p. 151.

a. Sullivan Island, 13th Jan. 1882.

CALOBATES MELANOPE (Pall.), Oates, op. cit. vol. i. p. 159. a. Q, Elphinstone Island, 13th March, 1882.

<sup>\* &#</sup>x27;Stray Feathers,' vol. vi. p. 266.

LIMONIDROMUS INDICUS (Gm.), Oates, op. cit. vol. i. p. 164. a.  $\sigma$ , Elphinstone Island, 14th; b.  $\circ$ , 13th March, 1882.

IOLE VIRIDESCENS, Bl., Oates, op. cit. vol. i. p. 177. a. King Island.

MICROPUS MELANOCEPHALUS (Gm.), Oates, op. cit. vol. i. p. 181.

a. Minthantoung, Mergui, 22nd Dec. 1881. b. &, Mergui, 27th Dec. 1881.

CRINIGER GUTTURALIS (Bp.), Oates, op. cit. vol. i. p. 185.

a. Thaing, King Island, 24th Jan. 1882. b. d, Yimiki, King Island.

Trachycomus ochrocephalus (Gm.), Oates, op. cit. vol. i. p. 188.

a. &, Zediwon, Mergui, 23rd Dec. 1881.

Pycnonotus analis (*Horsf.*), Oates, op. cit. vol. i. p. 191. a.  $\sigma$ , Mergui, 23rd; b.  $\circ$ , 2, 26th March, 1882.

Otocompsa Jacosa (*Linn.*), *Oates*, *op. cit.* vol. i. p. 198. a. o, b. o, Mergui, 19th March, 1882. c, d. o o, Mergui, 27th Dec. 1881.

OTOCOMPSA FLAVIVENTEIS (*Tick.*), *Oates*, *op. cit.* vol. i. p. 199. *a*, *b*.  $\circlearrowleft$ , Minthantoung, Mergui, 22nd Dec. 1881.

EGITHINA TIPHIA (Linn.), Oates, op. cit. vol. i. p. 202. a. b. 3. Mergui, 23rd March, 1882. c. 2. Minthantou

 $a,\,b.$  3, Mergui, 23rd March, 1882. c. 2, Minthantoung, Mergui, 22nd Dec. 1881.

ÆTHORHYNCHUS LAFRESNAYII (Hartl.), Oates, op. cit. vol. i. p. 204.

a. d, Minthantoung, Mergui, 22nd Dec. 1881.

"In the yellow colour of the ear-coverts and margins of the wing-coverts this specimen approaches Æ. xanthotis, Sharpe." (Wardlaw Ramsay.)

Chloropsis chlorocephala (Wald.), Oates, op. cit. vol. i. p. 208.

a. Sullivan Island, 9th; b, c. 11th Jan. 1882. d. d, Elphinstone Island, 1st March, 1882.

IRENA PUELLA (Lath.), Oates, op. cit. vol. i. p. 209.

a.  $\sigma$ , b. Q, Elphinstone Island, 4th; c.  $\sigma$ , 9th; d. Q, 1st March, 1882. e.  $\sigma$ , Yimiki, King Island, 24th Feb. 1882. f. Q, Zediwon, Mergui, 23rd Dec. 1881.

Oriolus indicus, Jerd., Oates, op. cit. vol. ii. p. 211.

a.  $\sigma$ , Elphinstone Island, 9th; b.  $\circ$ , 13th March, 1882. c.  $\sigma$ , King Island, 15th; d.  $\sigma$ , 18th Feb. 1882. e.  $\circ$ , Mergui, 23rd March, 1882.

BUCHANGA ATRA (Herm.), Oates, op. cit. vol. i. p. 218.

a. Sullivan Island, 9th Jan. 1882. b. ♀, Mergui, 20th; c. ♂, 23rd March, 1882. d. Zediwon, Mergui, 23rd Dec. 1881.

BUCHANGA LONGICAUDATA (A. Hay), Oates, op. cit. vol. i. p. 220.

a. d, Mergui, 19th March, 1882.

BUCHANGA LEUCOGENYS, Wald., Oates, op. cit. vol. i. p. 222.

a. ♂, Ngā or Fish Islet, King Island Bay, 18th Feb. 1882.
 b. ♀, Elphinstone Island, 13th March, 1882.

Dissemurus paradiseus (Linn.), Oates, op. cit. vol. i. p. 225.

 $a. \ \$ Q, Elphinstone Island, 4th;  $b, \ c. \ \$ G, 5th;  $d, \ e. \ \$ G $\ \$ Q, 9th March, 1882.

"The intermediate race with a moderate crest." (Wardlaw Ramsay.)

Pericrocotus cinereus, Lafres., Oates, op. cit. vol. i. p. 241. a. &, Elphinstone Island, 13th March, 1882.

Mr. Oates first met with this species at Kyeikpadien, near Pegu, in the cold weather, where he also in the same season obtained *P. cantonensis*, and he mentions that Mr. Davison also procured this species at various places in the Malay Peninsula.

Pericrocotus peregrinus (Linn.), Oates, op. cit. vol. i. p. 245. a.  $\sigma$ , Elphinstone Island, 1st Feb. 1882. b, c.  $\sigma$   $\varphi$ , Elphinstone Island, 1st; d.  $\varphi$ , e.  $\varphi$ , 5th March, 1882. f.  $\sigma$ , Thaing, King Island, 31st Jan. 1882. g.  $\sigma$ , Ihapo, King Island, 23rd Jan. 1882.

The prevalence of this Minivet in these islands seems to verify Mr. Davison's observation that it is a frequenter of the sea-coast.

MUSCITREA GRISOLA (Bl.), Oates, op. eit. vol. i. p. 257. a.  $\beta$ , b.  $\varphi$ , Elphinstone Island, 5th March, 1882.

In the "Birds of Tenasserim" \*\* it is remarked that this is a rare visitant to the Province, and that if common anywhere it is only so in the islands of the Mergui Archipelago. Mr. Davison procured it fifty-two miles north-west of Moulmein and at Kolan Island, twenty-five miles south of Mergui.

HYPOTHYMIS AZUREA (Bodd.), Oates, op. cit. vol. i. p. 265.

a, b. Sullivan Island, 12th; c. 9th Jan. 1882. d.  $\sigma$ , Elphinstone Island, 4th; e.  $\sigma$ , 9th March, 1882. f.  $\mathcal{Q}$ , Yimiki, King Island, 24th Feb. 1882. g. Thapo, King Island, 25th Jan. 1882. h. Thaing, King Island, 24th Jan. 1882. i. Zediwon, Mergui, 23rd Dec. 1881.

I observed this bird on the small rocky islet previously mentioned under *Monticola cyanus*. It is common in King, Elphinstone, and Sullivan Islands.

RHIPIDURA JAVANICA (Sparrm.), Oates, op. cit. vol. i. p. 267. a. &, Mergui, 23rd March, 1882.

Hemichelidon sibirica (Gm.), Oates, op. cit. vol. i. p. 275 a. Thaing, King Island, 21st Jan. 1882. b. Thaing, King Island, 1st Feb. 1882.

Alseonax Latirostris (Raffl.), Oates, op. cit. vol. i. p. 277.

a. Thaing, King Island, 24th; b. 31st Jan. 1882. c.  $\circ$ , Ngā, King Island Bay, 9th Feb. 1882. d.  $\circ$ , Minthantoung, Mergui, 22nd Dec. 1881.

SIPHIA RUBECULOIDES (Viq.), Oates, op. cit. vol. i. p. 287.

a. Thaing, King Island, 31st Jan. 1882. b. Minthantoung, Mergui, 22nd Dec. 1881.

"In this specimen (b) the rufous extends in a narrow line almost to the chin." (Wardlaw Ramsay.)

HIRUNDO RUSTICA, Linn., Oates, op. cit. vol. i. p. 302.

a. Minthantoung, Mergui, Jan. 1882. b. 3, Mergui, 24th March, 1882.

HYPUROLEPIS JAVANICA (Sparrm.), Oates, op. cit. vol. i. p. 308. a.  $\circ$ , Mergui, 20th Feb. 1882. b.  $\circ$ , Elphinstone Island, 13th Feb. 1882. c Ngā Islet, Kiug Island, 14th Feb. 1882.

Mr. Davison met with a few examples of this species at Mergui in June, but they are not numerous, and he believed that they were then migrating. He never observed them in any other part of Tenasserim; but Mr. Theobald states that he found this species breeding at Tenasserim in April, and Mr. Oates seems disposed to regard it as a resident species.

ÆTHOPYGA CARA, Hume, Oates, op. cit. vol. i. p. 316.

 $a, b. \ 3$ , Sullivan Island, 9th;  $c. \ 2$ , 11th Jan. 1882.  $d. \ 3$ , Zimiki, King Island, 24th Feb. 1882.

Mr. Davison\* observed this bird only as far south as the town of Tenasserim; but I found it not at all uncommon at Sullivan Island, among shrubs close to a beach which was fringed by Casuarina equisetifolia, Forsk.

CINNYRIS HASSELTI (Temm.), Oates, op. cit. vol. i. p. 318.

a.  $\circlearrowleft$ , Sullivan Island, 9th; b, c.  $\circlearrowleft$ , 11th Jan. 1882. d.  $\circlearrowleft$ , Thaing, King Island, 31st Jan. 1882.

This species I found associated with the previous Sun-bird in the same locality in Sullivan Island. Both were equally common.

CINNYRIS FLAMMAXILLARIS (Bl.), Oates, op. cit. vol. i. p. 320. a, b. Sullivan Island, 9th Jan. 1882. c. d, Elphinstone Island, 5th; d. d, 9th March, 1882.

From the same locality in Sullivan Island as the two foregoing si ecies.

Anthreptes Malaccensis (Scop.), Oates, op. cit. vol. i. p. 324. a.  $\sigma$ , Sullivan Island, 1st Jan. 1882. b.  $\sigma$ , c.  $\varphi$ , d.  $\sigma$ , Thaing, King Island, 24th Jan. 1882, 1st Feb. 1882. e.  $\sigma$ , Thapo, King Island, 25th Jan. 1882. f.  $\varphi$ , Ngā Islet, King Island Bay, 9th; g.h.  $\sigma$ , i.  $\varphi$ , 11th Feb. 1882. k.  $\sigma$ , l.  $\varphi$ , Crow Islet, 27th Feb. 1882. m.  $\varphi$ , Elphinstone Island, 7th March, 1882.

The presence of this Sun-bird on the little rocky island mentioned in the beginning of this list, and also in King Island, Elphinstone Island, and Sullivan Island, indicates its wide distribution among the islands of the Archipelago. In King Island I found it generally on old clearings in the neighbourhood of the villages of Thaing and Thapo, at the head of King Island Bay, and on Ngā Island.

<sup>\* &#</sup>x27;Stray Feathers,' vol. vi. p. 179.

Anthreptes singalensis (*Temm.*), Oates, op. cit. vol. i. p. 326. a. Q, Yimiki, King Island, 24th Feb. 1882. On clearings in the forest in the centre of the island.

DICÆUM CRUENTATUM (Linn.), Oates, op. cit. vol. i. p. 332.

a. Thaing, King Island, 1st Feb. 1882. b. ♀, Elphinstone Island, 4th; c. ♀, 5th March, 1882. d. Mergui, 27th Dec. 1881.

DICÆUM TRIGONOSTIGMA (Scop.), Oates, op. cit. vol. i. p. 336. a. &, Elphinstone Island, 4th; b, c. & Q, 5th March, 1882. d. Thapo, King Island, 25th Jan. 1882. e. King Island, 16th Feb. 1882.

Passer montanus (Linn.), Oates, op. cit. vol. i. p. 348. a, b. &, Mergui, 23rd March, 1882.

AMADINA ACUTICAUDA (Hodgs.), Oates, op. cit. vol. i. p. 364.  $a, b. \ \$ ,  $\$ Yımiki, King Island, 24th Feb. 1882. On clearings in the centre of the island.

STURNOPASTOR SUPERCILIARIS, Bl., Oates, op. cit. vol. i. p. 378.

a. Mergui, 20th; b. &, 19th; c, 2, 29th March, 1882.

Acridotheres fuscus (Temm.), Oates, op. cit. vol. i. p. 380. a.  $\sigma$ , Mergui, 9th; b,  $\varphi$ , 20th; c.  $\varphi$ , 23rd March, 1882.

Calornis Chalybea (Horsf.), Oates, op. cit. vol. i. p. 390.

a.  $\eth$ , Elphinstone Island, 5th Feb. 1882; b.  $\lozenge$ , 2nd; c,  $\eth$ , 4th; d,  $\eth$ , e.  $\eth$ , f.  $\eth$ , g.  $\lozenge$ , h.  $\lozenge$ , 9th; i.  $\lozenge$ , 13th March, 1882; k.  $\eth$ , 3rd July, 1882. l.  $\eth$ , Thaing, King Island, 31st Jan. 1882.

This bird is very common along the margins of the forest at the head of the great bay on the south-eastern side of Elphinstone Island, and I observed a large colony on a rocky islet on the western side of Sullivan Island, where it was breeding in recesses in the rocks, finding cover among some small shrubs on the summit of the islet.

Gracula Javanensis (Osbeck), Oates, op. cit. vol. i. p. 393. a, b. Sullivan Island, 12th; c. \(\mathcal{Q}\), 12th; d. 13th Jan. 1882. e. \(\mathcal{Q}\), f. \(\mathcal{Q}\), Elphinstone Island, 9th March, 1882. g. Thaing, King Island, 27th Jan. 1882.

This species was not uncommon at Sullivan Island, and its

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favourite resort was the tops of the highest trees in the forest. Its noisy calls became a familiar sound just before sundown.

CORVUS MACRORHYNCHUS, Wagler, Oates, op. cit. vol. i. p. 397.

a. J, Yimiki, King Island, 24th Feb. 1882.

This Crow appears to be generally distributed throughout the islands, and, as already mentioned, I found a pair even breeding on a small rocky islet. There were four young ones in the nest.

Corvus insolens, *Hume*, *Oates*, op. cit. vol. i. p. 399. a. Q, Mergui, 20th; b.  $\sigma$ , 19th March, 1882.

CRYPSIRHINA VARIANS (Lath.), Oates, op. cit. vol. i. p. 404.  $a, b. \circlearrowleft Q$ , Mergui, 23rd March, 1882.

CYMBORHYNCHUS MACRORHYNCHUS (Gm.), Oates, op. cit. vol. i. p. 428.

a,b.  $\eth$  , c,d.  $\eth$  , Mergui, 23rd March, 1882. e.  $\eth$  , f.  $\supsetneq$  , Zediwon, Mergui, 23rd Dec. 1881.

Among shrubs in dense shade on the outskirts of a mangrove-swamp.

Collocalia Linchi, Horsf. & Moore, Oates, op. cit. vol. ii. p. 10.

 $a. \ \ \ \ \, \ \ \, \ \ \,$  Yimiki, King Island, 24th Feb. 1882.

Blyth\* has recorded this bird from the Mergui Archipelago. Mr. Davison says it does not occur on Mergui Island itself nor in any of the small islands near it.

Lyncornis cerviniceps, Gould, Oates, op. cit. vol. ii. p. 22. a. Elphinstone Island, 3rd March, 1882.

Alophonerpes pulverulentus (Temm.), Oates, op. cit. vol. ii. p. 29.

a. Q, Elphinstone Island, 13th March, 1882.

HEMICERCUS CANENTE (Less.), Oates, op. cit. vol. ii. p. 30.  $a, b. \ \$ , Elphinstone Island, 9th March, 1882.

Picus canicapillus, Bl., Oates, op. cit. vol. ii. p. 36. a.  $\circlearrowleft$ , Elphinstone Island, 9th; b.  $\circlearrowleft$ , 13th March, 1882.

<sup>\*</sup> Journ. As. Soc. Beng. pt. ii. (extra no.) vol. xliii. 1875, p. 85.

GECINUS VIRIDANUS (Bl.), Oates, op. cit. vol. ii. p. 48.

a. 3, Yimiki, King Island, 24th Feb. 1882. b. Mergui, 23rd March, 1882.

Chrysocolaptes strictus (*Horsf.*), *Oates*, *op. cit.* vol. ii. p. 53. a.  $\mathbb{Q}$ , Yimiki, King Island, 29th Feb. 1882. b, c.  $\mathbb{S}$ , d.  $\mathbb{Q}$ , Elphinstone Island, 9th; e.  $\mathbb{Q}$ , 13th March, 1882.

MELITTOPHAGUS LESCHENAULTI (Vieill.), Oates, op. cit. vol. ii. p. 68.

a. Thaing, King Island, 24th Jan. 1882; b.  $\circlearrowleft$ , 24th Feb. 1881; c.  $\circlearrowleft$ , 22nd Dec. 1881.

Eurystomus obientalis (*Linn.*), *Oates, op. cit.* vol. ii. p. 70. a.  $\delta$ , Yimiki, King Island, 24th Feb. 1882.

Alcedo Bengalensis, Gm., Oates, op. cit. vol. ii. p. 72.

a.  $\circlearrowleft$ , King Island Bay, 17th Feb. 1882. b.  $\circlearrowleft$ , Elphinstone Island, 5th; c.  $\circlearrowleft$ , 9th; d.  $\circlearrowleft$ , 13th March, 1882.

Pelargopsis amauroptera (Pears.), Oates, op. cit. vol. ii. p. 78. a. &, Elphinstone Island, 13th March, 1882. b. &, Yimiki, King Island, 24th Feb. 1882.

HALCYON PILEATA (Bodd.), Oates, op. cit. vol. ii. p. 83. a. Thaing, King Island, 31st Jan. 1882.

Halcyon Chloris (Bodd.), Oates, op. cit. vol. ii. p. 85.

a.  $\circlearrowleft$ , Elphinstone Island, 1st; b.  $\circlearrowleft$ , 9th March, 1882. c.  $\sigma$ , d.  $\circlearrowleft$ , King Island Bay, 17th Feb. 1882. e.  $\sigma$ , f.  $\circlearrowleft$ , g.  $\circlearrowleft$ , Crow Islet, 27th Feb. 1882.

This is the most prevalent Kingfisher among the northern islands. In February it was found breeding on Crow Islet.

DICHOCEROS BICORNIS (Linn.), Oates, op. cit. vol. ii. p. 87.

a. Thaing, King Island, 31st Jan. 1882.b. Elphinstone Island, 13th March, 1882.

This species is doubtless distributed thoughout the Archipelago, but is relatively rare compared with *Rhytidoceros subruficollis*.

ANTHRACOCEROS ALBIROSTRIS (Shaw), Oates, op. cit. vol. ii. p. 90. a. Thaing, King Island, 30th Jan. 1882. b, c. & \( \zeta\), King Island, 8th Feb. 1882. d. \( \zeta\), Elphinstone Island, 7th; e. \( \zeta\), 13th March, 1882.

Rhytidoceros subruficollis (Bl.), Oates, op. cit. vol. ii. p. 91. a.  $\sigma$ , b.  $\sigma$ , c.  $\sigma$ , d.  $\sigma$ , King Island, 29th Jan. 1882. e.  $\varphi$ ,

6th; f.  $\circ$ , 8th Feb. 1882. g.  $\circ$ , Yimiki, King Island, 24th Feb. 1882.

This Hornbill occurs in great numbers in islands of the Archipelago, especially in those towards the north. On the mainland, however, south of Tavoy, Davison records that he only obtained a single straggler, while to the north of Tavoy as far as Moulmein the species was common.

In the morning and evening large flocks were being constantly seen at great heights flying long distances, and crossing the sea from island to island, their approach being heralded by the loud croaking noise so characteristic of their flight generally, associated with a peculiar harsh call, which, when the birds hustled each other, whether in sport or anger I knew not, became converted into a noise resembling the bark of a dog. It is a very wary bird, and keeps to the tops of the highest trees.

A Karen brought to me at King Island, on the 8th March, a female bird and her egg, both of which he had removed from a hole in a large tree which he had recklessly felled, with the assistance of some other Karens, for the sole purpose of obtaining these objects, in the hope that I would purchase them. Along with the bird and egg he also brought a part of the nest itself, which was made up of a resin which is common in these islands and of a substance which he described as a gum. The pure white egg had a somewhat leathery shell deficient in lime.

HARPACTES ORESKIOS (Temm.), Oates, op. cit. vol. ii. p. 100. a. Thaing, King Island, 1st Feb. 1882. b. &, Zimiki, King Island, 24th Feb. 1882.

In clearings surrounded by forest.

Cuculus striatus, *Drap.*, *Oates*, *op. cit.* vol. ii. p. 105. a. Q, Elphinstone Island, 9th March, 1882.

HIEROCOCCYX SPARVERIOIDES (Vig.), Oates, op. cit. vol. ii. p. 108.

a. J, Elphinstone Island, 9th March, 1882.

Mr. Davison met with this Cuckoo only as far south as Amherst.

Hierococcyx nanus, Hume, Oates, op. cit. vol. ii. p. 110.

a. Q, Elphinstone Island, 5th; b. 6th March, 1882.

Mr. Davison discovered this species at Bankasoon in the extreme south of the province of Tenasserim, but afterwards found it "in

April in the forests at the base of Nwalabo, and between that place and Tavoy "\*.

CACOMANTIS THRENODES, Cab. et Hein., Oates, op. cit. vol. ii. p. 111.

a. &, Mergui, 23rd March, 1882.

Surniculus lugubris (*Horsf.*), Oates, op. cit. vol. ii. p. 112. a. Thaing, King Island, 24th Jan. 1882. b. 3, Elphinstone Island, 9th March, 1882.

Rhopodytes tristis (Less.), Oates, op. cit. vol. ii. p. 121.

a.  $\delta$ , b.  $\mathfrak{P}$ , Yimiki, King Island, 24th Feb. 1882. c.  $\mathfrak{P}$ , Elphinstone Island, 1st; d.  $\delta$ , 14th March, 1882. e. Minthantoung, Mergui, 22nd Dec. 1881.

CENTROCOCCYX INTERMEDIUS, Hume, Oates, op. cit. vol. ii. p. 126.

a.  $\circlearrowleft$ , Yimiki, King Island, 24th Feb. 1882. b.  $\circlearrowleft$ , Elphinstone Island, 9th; c.  $\circlearrowleft$ , 14th March, 1882.

XANTHOLÆMA HÆMACEPHALA (Müll.), Oates, op. cit. vol. ii. p. 136.

a. J, Yimiki, King Island, 24th Feb. 1882.

Palæornis fasciatus (Müll.), Oates, op. cit. vol. ii. p. 143.

a. Thaing, King Island, 31st Jan. 1882. b.  $\sigma$ , King Island Bay, 19th Feb. 1882.

LORICULUS VERNALIS (Sparrm.), Oates, op. cit. vol. ii. p. 146. a. d, b. d, Thaing, King Island, 2nd Feb. 1882.

Ketupa Javanensis, Less., Oates, op. cit. vol. ii. p. 149.

a. Q, Elphiustone Island, 13th March, 1882. b. King Island, 19th Feb. 1882.

Scops pennatus, Hodgs., Oates, op. cit. vol. ii. p. 154.

a. d, Ngā Islet, King Island Bay, 18th Feb. 1882.

"This belongs to the race named S. stictonotus by Sharpe, Cat. Birds Brit. Mus. vol. ii. p. 54." (Wardlaw Ramsay.)

Scops Lempiji (Horsf.), Oates, op. cit. vol. ii. p. 156. A young bird, probably of this species.

NINOX SCUTULATA (Raffl.), Oates, op. cit. vol. ii. p. 159. a. ♀, Elphinstone Island, 7th March, 1882.

<sup>\* &#</sup>x27;Stray Feathers,' vol. vi. pp. 157, 502.

ASTUR TRIVIRGATUS (Temm.), Oates, op. cit. vol. ii. p. 177. a. Thaing, King Island, 1st Feb. 1882.

Butastur indious (Gm.), Oates, op. cit. vol. ii. p. 197. a. &, Mergui, 23rd March, 1882.

Haliastur indus (Bodd.), Oates, op. cit. vol. ii. p. 201.

a. c, King Island, 24th Feb. 1882. b.  $\circlearrowleft$  juv., King Island Bay, 11th Feb. 1882.

PERNIS PTILORHYNCHUS (Temm.), Oates, op. cit. vol. ii. p. 207. a. &, Elphinstone Island, 14th March, 1882.

This rare bird was recorded many years ago by Blyth \* from Mergui, and more recently by Hume and Davison from Moulmein and Amberst.

BAZA LOPHOTES (Cuv.), Oates, op. cit. vol. ii. p. 208. a. J, Elphinstone Island, 1st March, 1882.

ARDEA SUMATRANA, Raffl., Oates, op. cit. vol. ii. p. 244. a. Q, King Island Bay, 19th Feb. 1882.

I only observed this large Heron on one occasion, when the extensive mud-flats in King Island Bay were exposed at springtide, on which occasion they were visited by about half a dozen of these birds.

HERODIAS GARZETTA (Linn.), Oates, op. cit. vol. ii. p. 248. a. Ngā Islet, King Island Bay, 18th Feb. 1882.

Demiegretta sacra (Gm.), Oates, op. cit. vol. ii. p. 250.

a.  $\circlearrowleft$ , Sullivan Island, 6th Jan. 1882. b.  $\circlearrowleft$ , King Island, 17th Feb. 1882. c.  $\circlearrowleft$ , King Island Bay, 20th; d, e.  $\circlearrowleft$   $\circlearrowleft$ , 26th Feb. 1882.

Common throughout the islands and much frequenting the mud-flats at King Island Bay.

BUTORIDES JAVANICA (Horsf.), Oates, op. cit. vol. ii. p. 254. a. Q, b. Imm., Elphinstone Island, 1st; c. &, 7th March, 1882.

Alsocomus puniceus, *Tick.*, *Oates*, *op. cit.* vol. ii. p. 289. a, b.  $\sigma$ , Ngā Islet, King Island Bay, 18th Feb. 1882.

Ngā Islet is a small well-wooded island about a quarter of a mile long and 80 feet high, situated at the head of King Island Bay, with some other and similar islands close beside it. These

<sup>\*</sup> Trans. As. Soc. Beng. vol. xxi. p. 436.

islands, besides supporting a small population of their own, were visited by many birds from the main island (King Island) during their daily wanderings in search of food, and this Pigeon was among those visitors. It ranges from Tonghoo through Pegu to Tenasserim, and in the latter province Davison observed it near Mergui.

Turtur tigrinus (Temm.), Oates, op. cit. vol. ii. p. 290.

a. Juv., Thapo, King Island, 23rd Jan. 1882. b. Thaing, King Island, 31st Jan. 1882. c. 3, Yimiki, 24th Feb. 1882.

CHALCOPHAPS INDICA (Linn.), Oates, op. cit. vol. ii. p. 297. a.  $\sigma$ , Elphinstone Island, 4th; b.  $\sigma$ , 5th March, 1882.

CARPOPHAGA ÆNEA (Linn.), Oates, op. cit. vol. ii. p. 301.

a. Thaing, King Island, 31st Jan. 1882. b.  $\bigcirc$ , Elphinstone Island, 9th; c, d.  $\bigcirc$ , 13th March, 1882.

I observed a large Imperial Pigeon in Sullivan Island, but as it was extremely wary, and frequented only the tops of the highest trees in the densest parts of the forest, I did not succeed in obtaining any examples. It may probably be *C. insularis* from the Nicobar Islands, a species which Oates has suggested may occur in the Archipelago.

TRERON NIPALENSIS (Hodgs.), Oates, op. cit. vol. ii. p. 306. a. &, Elphinstone Island, 5th March, 1882.

OSMOTREBON BICINCTA (Jerd.), Oates, op. cit. vol. ii. p. 308. a. &, Elphinstone Island, 9th; b. &, 13th March, 1882.

OSMOTRERON VERNANS (Linn.), Oates, op. cit. vol. ii. p. 309.

a. Yimiki, King Island, 24th Feb. 1882. b. ♂, Elphinstone Island, 9th March, 1882.

This Pigeon has been found on the mainland from Mergui south to Malewoon.

Butreron Cappelli.—Treron Cappelli (Temm.), Salvad. Ann. Mus. Civ. Genov. vol. v. p. 285 (1874).

a. d, Elphinstone Island, 13th March, 1882.

"The occurrence of this species is interesting. So far as I know, there is no record of its having been obtained so far north before." (Wardlaw Ramsay.)

TURNIX PLUMBIPES (*Hodgs.*), *Oates*, op. cit. vol. ii. p. 337. a. Q, Mergui, 23rd March, 1882.

Gallicrex cinereus (Gm.), Oates, op. cit. vol. ii. p. 349. a. d, Mergui, 19th March, 1882.

Davison only observed this species as far south as the mouth of the Tavoy estuary.

Podica personata (*Gray*), *Oates*, *op. cit.* vol. ii. p. 353. a. S. Elphinstone Island, 13th March, 1882.

This rare bird, which was originally described from a Malacca specimen, has been found by Davison at Bankasoon, Mergui, and Amherst.

ÆGIALITIS GEOFFROYI (Wagl.), Oates, op. cit. vol. ii. p. 366. a. Q, Elphinstone Island, 5th March, 1882.

Mr. Davison never met with this bird in Tenasserim, but Mr. Hume's collectors obtained it 52 miles N.W. of Moulmein, and Dr. Armstrong at Amherst.

ÆGIALITIS MONGOLICUS (Pall.), Oates, op. cit. vol. ii. p. 368. a, b.  $\mathfrak{P}$ , Elphinstone Island, 5th March, 1882.

ÆGIALITIS CANTIANA (Lath.), Oates, op. cit. vol. ii. p. 368. a.  $\mathfrak{D}$ , Elphinstone Island, 8th March 1882.  $b^*$ .

Lobivanellus atronuchalis (Bl.), Oates, op. cit. vol. ii. p. 374.

a. ♂, b. ♀, Yimiki, King Island, 24th Feb. 1882.

STREPSILAS INTERPRES (Linn.), Oates, op. cit. vol. ii. p. 376. a. &, Gnā or Fish Islet, King Island Bay, 4th; b. &, 9th Feb. 1882.

This bird does not appear in Hume and Davison's list.

Gallinago cœlestis (Frenzel), Oates, op. cit. vol. ii. p. 381.  $a \uparrow$ .

Tringoïdes hypoleucus (Linn.), Oates, op. cit. vol. ii. p. 399. a. Q, King Island, 17th Feb. 1882.

\* Label lost.

† With no information.